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EXAMINER
GAKH, YELENA G

ART UNIT	PAPER NUMBER
1743	17

DATE MAILED: 06/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/595,583	MIZE ET AL.	
	Examiner	Art Unit	
	Yelena G. Gakh, Ph.D.	1743	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 June 2003* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-44 and 59* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-44 and 59* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *15 June 2000* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

1. RCE and Amendment, filed on 06/05/03, are acknowledged. Claims 1-44 and 59 are pending in the Application.

The following Office action is based on the amendment.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

3. Claims 1-44 and 59 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Independent claims 1, 9, 14, 35 and 40 recite in their preambles "a method of generating information about particulates present in a fluid", which makes the field of the invention vague and indefinite; the claims further recite a step of scanning a substrate with a microscope; in order to define the field of the claimed invention and make the claims clearer, the examiner suggests inserting expression "utilizing a microscope" in the preambles of the claims.

The expressions "a substrate *comprising* a first shade" and "the substrate *comprising* the second shade" in claim 1 are not clear and technically incorrect; the examiner suggests changing them to "a substrate *having* a shade".

Claim 1 recites that the filtering imparts a second shade. It is not clear, what this might mean. Does it mean that the second shade appears during the filtering and disappears when it stops? If it does, does it mean that the scanning with microscope occurs in the process of filtering? It is unclear, how the filtering can impart the second shade when the fluid is a gas? Does the gas chemically react with the substrate to change its shade? Or the second shade is due to the filtered particulates? In this case it is not clear, how the filtered particulates can have a contrast relative to the second shade, if they create this shade? It is also not clear, what is the role of the first shade versus the second shade in scanning the substrate? Since changing the

shade of the substrate does not seem to play role in the scanning of the particulates as long as the substrate provides a background for the particulates, the examiner considers any substrate used in microscopic analysis as the substrate of claims 1-7.

In claim 6 the examiner suggests changing "the relative contrast" to "their relative contrast" or to "the relative contrast of the particulates" to make it clearer that the relative contrast is measured between particulates rather than relative to the background (the substrate).

The expression of claim 8 "a group, which appears darker than the substrate in the obtained data" is not quite clear. What is meant by "data" in this claim? Data can be numerical data, in which case this expression does not make sense. Are data an image? If the data are image, the examiner suggests inserting --, data are image -- after "wherein the microscope is a light microscope", and changing "obtained data" to "obtained image".

Claim 14 recites scanning the first and the second substrates to obtain data on particulates located on the first and second substrates; in the step of "processing the data obtained by the microscope" it is not clear, which data set is meant here - obtained for the first or the second substrate?

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. **Claims 1-2, 4 and 7** rejected under 35 U.S.C. 102(e) as being anticipated by Pavate et al. (US 6,001,227, IDS).

Pavate discloses a method of generating information about particulates present in a fluid by providing a substrate comprising a first shade; filtering the fluid through the substrate with the particulates retained on the substrate, thus providing a second shade; after filtering scanning across at least a portion of the **gridded** substrate using **optical [light] microscopy/SEM analysis**, with SEM being scanning electronic microscope, which gives digital images upon scanning of the substrate along the grid; the images are formed due to the contrast of two or more particulates relative to the substrate background. The information obtained is related to size, shape and distribution of particulates as a typical information on morphology obtained by SEM analysis. The contrast of the particles relative to the substrate background is due to response of particulates either to photons (light microscopy) or electrons (SEM). Pavate also indicates that "the inclusion size distribution *may be* determined using manual light microscopy techniques such as, ASTM F24 and F25"; however, disclosed SEM analysis inherently implicates the features of the method described above (col.2, lines 45-50).

Particularly, Pavate discloses measuring inclusion content of aluminum/copper targets by partially dissolving a sample target in HCl/HNO_3, filtering the solution through the substrate and determining the content of the undissolved inclusions, such as **metal oxides** (Al_2O_3), nitride precipitates, **carbide** precipitates by optical microscope/SEM analysis. The **silicon** content should be less than 1% by weight (col. 11, lines 38, 39). Filtering the solution through the gridded substrate (filter) leads to locating undissolved particulates along the grid.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. **Claim 3** is rejected under 35 U.S.C. 103(a) as being unpatentable over Pavate.

Pavate does not specifically disclose filtering a gas comprising particulates instead of a liquid, as recited in claim 3; however, it would have been obvious for anyone of ordinary skills in the art to use gas comprising particulates instead of liquid in Pavate's method, because the gas plays the same role of a carrier for the particulates as the liquid in this method.

10. **Claims 5-6** are rejected under 35 U.S.C. 103(a) as being unpatentable over Pavate in view of Woodward et al. (US 5,494,743).

Pavate does not specifically disclose generating information about at least two different types of particulates based on their different relative contrast, e.g. those containing more carbon or oxygen, and determining their concentration.

Woodward discloses antireflection coatings for carbon-based polymer substrates, comprising inorganic metal compounds, including metal oxides, having index of refraction greater than that of the substrate, which results in a contrast image obtained by light microscope (Abstract and Fig. 8).

It would have been obvious for anyone of ordinary skill to apply conventional knowledge of a difference of refractive indices of carbon- and oxygen-containing compounds, which results

in relative contrasts of these compounds in light microscopy, as demonstrated by Woodward, to Pavate's method and calculate their content (concentration), because this gives information about the amount of particulates depending on their type, rather than just their sizes, which obviously expands the application of Pavate's method.

11. **Claim 8** is rejected under 35 U.S.C. 103(a) as being unpatentable over Pavate in view of Woodward as applied to claims 5-6 above, and further in view of Dewey (US 3,674,926).

Pavate in view of Woodward do not specifically disclose sorting particulates according to their lighter or darker shade relative to the substrate.

Dewey discloses "feature counter with improved masking and grey level detection" in scanning microscope, wherein the counter groups the particulates according to their lighter or darker shade relative to the background or wherein the grey level can be optimized, so that their "light absorbing properties" are changed (Abstract, col. 1).

It would have been obvious for anyone of ordinary skill to modify Pavate-Woodward's method by implementing Dewey's counter, which can count separately particulates with lighter and darker shade than the background, because this makes counting different types of particulates more accurate and straightforward.

12. **Claims 9 and 11-12** are rejected under 35 U.S.C. 103(a) as being unpatentable over Pavate in view Udler et al. (Technical note 203).

Pavate discloses a method of generating information about materials present in a composition by providing a composition (a sputtering target); utilizing a reagent (HCl/HNO_3) to dissolve at least a portion of the composition; filtering he mixture through a substrate (filter) with undissolved particulates retained on the substrate; scanning across the substrate with light microscope or SEM; obtaining digital image to obtain information on the content of the particulates based on their contrast relative to the substrate.

Pavate does not specifically disclose applying his method for a composition having a purity of at least 99.995%.

Udler discloses tungsten-titanium sputtering targets with purities 99.99% (ULTRA), 99.995% (ULTRA 2) and 99.9975% (ECLIPSE, RN 1,680,113; registered on 03/24/1990), for which concentration analysis by SEM is performed. The targets of such purities are considered to be conventional high-grade targets at the time the invention was made.

It would have been obvious for anyone of ordinary skills in the art to apply Pavate's method to sputtering target of high-grade purity, such as disclosed by Udler, since these targets still have quality problems, such as inclusion and oxygen concentration, as indicated by Udler. The retained components are sorted by their response to electrons in SEMS analysis, disclosed by Pavate.

13. **Claim 10** is rejected under 35 U.S.C. 103(a) as being unpatentable over Pavate in view Udler, as applied to claims 9 and 11-12 above, and further in view of Woodward.

Pavate in view Udler does not specifically disclose generating information about the size, type, quantity or shape of the retained components, which differ by their oxide or carbon content.

Woodward discloses antireflection coatings for carbon-based polymer substrates, comprising inorganic metal compounds, including metal oxides, having index of refraction greater than that of the substrate, which results in a contrast image obtained by light microscope (Abstract and Fig. 8).

It would have been obvious for anyone of ordinary skill to apply conventional knowledge of a difference of refractive indices of carbon- and oxygen-containing compounds, which results in relative contrasts of these compounds in light microscopy, as demonstrated by Woodward, to Pavate-Udler's method, because this gives information about the content of retained components of different types, i.e. with different oxide or carbon content.

14. **Claim 13** is rejected under 35 U.S.C. 103(a) as being unpatentable over Pavate in view of Udler and Woodward, as applied to claims 9-12 above, and further in view of Dewey.

Pavate in view of Udler and Woodward do not specifically disclose sorting particulates according to their lighter or darker shade relative to the substrate.

Dewey discloses "feature counter with improved masking and grey level detection" in scanning microscope, wherein the counter groups the particulates according to their lighter or darker shade relative to the background.

It would have been obvious for anyone of ordinary skill to modify Pavate-Udler-Woodward's method by implementing Dewey's counter, which counts separately particulates with lighter and darker shade than the background, because this makes counting different types of particulates more accurate and straightforward.

15. **Claim 14-17, 21-30, 33 and 34** are rejected under 35 U.S.C. 103(a) as being unpatentable over Pavate in view of Meisburger et al. (US 5,502,306).

Pavate discloses a method of generating information about materials present in a composition by providing a composition (a sputtering target); utilizing a reagent (HCl/HNO_3) to dissolve at least a portion of the composition; filtering he mixture through a substrate (filter) with undissolved material retained on the substrate, the material related to the oxide content (Al_2O_3) and carbon content (carbide); scanning across the substrate with light microscope or SEM; obtaining digital image to obtain information on the content of the particulates based on their contrast relative to the substrate.

Pavate does not specifically disclose scanning across the substrate by automated displacement of the substrate relative to an observing portion of the microscope along a grid pattern.

Meisburger teaches electron beam inspection system and method comprising automated displacement of the substrate relative to the observing portion of the microscope.

It would have been obvious for anyone of ordinary skills in the art to use automated microscope of Meisburger, comprising means for automated displacement of the substrate relative to the observing part of the microscope, in Pavate's method, because this facilitates observing different portions of the substrate and make counting the particulates more efficient.

Pavate in view Meisburger do not specifically disclose "depth profiling the composition", in other words, determining its homogeneity, by comparing data of microscopic analysis obtained for two different parts of the composition sample, as recited in claim 14; however, it would have been obvious for anyone of ordinary skills in the art to do so, because the homogeneity of the sputtering targets is one of their quality parameters. All other limitations of the above-mentioned claims are disclosed in Pavate, as indicated in paragraph 5. For example, determining the content of the undissolved inclusions, indicated by Pavate, is equivalent to determining their concentration; using the same solvents and targets containing the same impurities, e.g. carbide, metal oxides, silicon, as Pavate, inherently leads to the dissolving metals in the solvent, making the silicon passed through the substrate and leaving particulates, including metals oxides on the substrate (filter). Pavate specifically discloses targets comprising aluminum and copper.

16. **Claims 18-20** are rejected under 35 U.S.C. 103(a) as being unpatentable over Pavate in view of Meisburger, as applied to claims 14-17, 21-30, 33 and 34 above, and further in view of Woodward.

Pavate in view of Meisburger do not specifically disclose generating information about at least two different types of particulates based on their different relative contrast, e.g. those containing more carbon or oxygen, and determining their concentration.

Woodward discloses obtaining contrast images of metal oxides relative to carbon-based polymer substrates by light microscopy, based on difference in their refractive indices (Abstract and Fig. 8).

It would have been obvious for anyone of ordinary skill to apply conventional knowledge of a difference of refractive indices of carbon- and oxygen-containing compounds, which results in relative contrasts of these compounds in light microscopy, as demonstrated by Woodward, to Pavate-Meisburger's method and calculate their content (concentration), because this gives information about the amount of particulates depending on their type, rather than just their sizes, which obviously expands the application of Pavate-Meisburger's method.

17. **Claims 31 and 32** are rejected under 35 U.S.C. 103(a) as being unpatentable over Pavate in view of Meisburger, as applied to claims 14-17, 21-30, 33 and 34 above, and further in view of International Advanced Materials (IAM).

Pavate in view of Meisburger do not specifically disclose targets comprising silver or lead.

IAM discloses various sputtering target materials, including silver and lead.

It would have been obvious for anyone of ordinary skills in the art to apply Pavate-Meisburger's method to the sputtering targets comprising silver or lead, such as disclosed by IAM, because they belong to the same class of targets and require the same quality control as the targets disclosed by Pavate.

18. **Claims 35-36, 38-39 and 59** are rejected under 35 U.S.C. 103(a) as being unpatentable over Pavate in view of Woodward, Dewey and International Advanced Materials (IAM).

Pavate discloses a method of generating information about materials present in a composition by providing a composition (a sputtering target); utilizing a reagent (HCl/HNO_3) to dissolve at least a portion of the composition; filtering he mixture through a substrate (filter) with

undissolved components retained on the substrate, the components being of at least two types – metal oxides (Al_2O_3) and carbides; scanning across the substrate with light microscope or SEM; obtaining digital image to obtain information on the content of the particulates based on their contrast relative to the substrate.

Pavade does not specify that the two types – metal oxides and carbides – give different shade relative to the background and each other.

Woodward teaches obtaining contrast images of metal oxides relative to carbon-containing polymers by light microscopy, based on their different indices of refraction.

It would have been obvious for anyone of ordinary skill to apply conventional knowledge of a difference of refractive indices of carbon- and oxygen-containing compounds, which results in relative contrasts of these compounds in light microscopy, as demonstrated by Woodward, to Pavate's method, because this gives information about the content of retained components of different types, i.e. with different oxide or carbon content.

Pavate in view of Woodward do not specifically disclose that one type of undissolved components being darker than the background and the other being lighter than the background.

Dewey discloses "feature counter with improved masking and grey level detection" in scanning microscope, wherein the counter groups the particulates according to their lighter or darker shade relative to the background or wherein the grey level can be optimized, so that their "light absorbing properties" are changed (Abstract, col. 1).

It would have been obvious for anyone of ordinary skill to modify Pavate-Woodward's method by implementing Dewey's counter, which can count separately particulates with lighter and darker shade than the background, because this makes counting different types of particulates more accurate and straightforward.

Pavate in view of Woodward and Dewey do not disclose compositions comprising at least one of Sb, Pb and Sn.

IAM discloses sputtering targets comprising Sb, Pb or Sn.

It would have been obvious for anyone of ordinary skills in the art to apply Pavate-Woodward-Dewye's method to IAM's targets, because they belong to the same class of sputtering targets as Pavate's compositions and are the subjects of the same quality control as the targets disclosed by Pavate.

19. **Claim 37** is rejected under 35 U.S.C. 103(a) as being unpatentable over Pavate in view of Woodward, Dewey and IAM, as applied to claims 35-36, 38-39 and 59 above, and further in view Kitamura.

Pavate in view of Woodward, Dewey and IAM does not particularly disclose displaying results as a histogram.

Kitamura teaches a particle analysis method "performed with a **scanning type electron microscope** which directs a narrow, focused electron beam through an electromagnetic lens onto a surface of a sample mounted on a high precision stage in scanning, produces a detection signal representing intensity of secondary electrons or reflected electrons from the sample surface, and displays a representation of the sample surface based on the detection signal, the method comprising the steps of: reading the image by controlling the **electron microscope** by automatically shifting views produced by scanning the electron beam from a most probable spot where particles may exist to less probable spots in sequence based on information contained in the signal of coordinates of a particle location; determining the particle detection location and acquiring a detection evaluation value in the image, under the assumption that the normal distribution portion of a **histogram** of detection intensity is due to a simple pattern and that the rest of the distribution of the histogram is due to a particle; and scanning a location where particles are determined to exist based on the result of the determining step" (col.1, lines 35-58).

It would have been obvious for anyone of ordinary skill to represent the results of Pavate-Woodward-Dewey-IAM's method as a histogram, as taught by Kitamura, because it is a convenient way to represent the content of the composition, obtained by optical microscopy/SEM analysis.

20. **Claims 40-44** are rejected under 35 U.S.C. 103(a) as being unpatentable over Pavate in view of Meisburger, Woodward and Dewey.

Pavate discloses a method of generating information about materials present in a composition by providing a composition (a sputtering target); utilizing a reagent (HCl/HNO_3) to dissolve at least a portion of the composition; filtering he mixture through a substrate (filter) with undissolved impurities retained on the substrate, impurities being of at least two types - metal oxides (Al_2O_3) and carbides, located along the grid on the gridded substrate; scanning across the

substrate with light microscope or SEM; obtaining digital image to obtain information on the content of the particulates based on their contrast relative to the substrate.

Pavate does not specifically disclose scanning across the substrate by automated displacement of the substrate relative to an observing portion of the microscope along a grid pattern.

Meisburger teaches electron beam inspection system and method comprising automated displacement of the substrate relative to the observing portion of the microscope (Abstract).

It would have been obvious for anyone of ordinary skills in the art to use automated microscope of Meisburger, comprising means for automated displacement of the substrate relative to the observing part of the microscope, in Pavate's method, because this facilitates observing different portions of the substrate and make counting the particulates more efficient.

Pavate in view of Meisburger do not specifically disclose generating information about at least two different types of impurities, i.e. those containing more carbon or oxygen, based on their different relative contrast.

Woodward teaches obtaining contrast images of metal oxides relative to carbon-containing polymers by light microscopy, based on their different indices of refraction (Abstract and Fig. 8).

It would have been obvious for anyone of ordinary skill to apply conventional knowledge of a difference of refractive indices of carbon- and oxygen-containing compounds, which results in relative contrasts of these compounds in light microscopy, as demonstrated by Woodward, i.e. giving lighter and darker shade relative to the contrast, to Pavate-Meisburger's method and calculate their content (concentration), because this gives information about the amount of particulates depending on their type, rather than just their sizes, which obviously expands the application of Pavate-Meisburger's method.

Pavate in view of Meisburger and Woodward do not specifically disclose modifying a light absorbing property of at least some of the impurities on the substrate and obtaining data on relative darkness of the impurities, one type being darker and the other – lighter than the substrate.

Dewey discloses "feature counter with improved masking and grey level detection" in scanning microscope, wherein the counter groups the particulates according to their lighter or

darker shade relative to the background and wherein the grey level can be optimized, so that their "light absorbing properties" are changed (Abstract, col. 1).

It would have been obvious for anyone of ordinary skill to modify Pavate- Meisburger-Woodward's method by implementing Dewey's counter, which can optimize the grey level (changing "light absorbing properties" of the impurities), so that the particulates with different reflection indices will appear as darker and lighter than the background, because this makes analysis of different types of impurities more accurate and straightforward.

Response to Arguments

21. Since the Applicant's arguments are directed to the previous Office action, and a new set of rejections is established in the present Office action, the arguments are not relevant to the new rejections and will not be responded.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yelena G. Gakh, Ph.D. whose telephone number is (703) 306-5906. The examiner can normally be reached on 10:00am-6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill A. Warden can be reached on (703) 308-4037. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Yelena G. Gakh
June 20, 2003